

BC hydro

FINANCIAL REVIEW 1989

INDUSTRY'S 500

RANKINGS 51-100

Rank	Company (head office)	Rank by assets	Assets \$'000
18,307	Great Atlantic & Pacific Co. of Canada (Toronto) Feb/88	173	501,802
75,743	P&R Corp. (Calgary)	50	2,125,038
46,159	F&N Woolworth Co. (Toronto) Jan/89	138	736,679
23,837	Schweitzer Ltd. (Toronto)	49	2,607,753
14,000	BC Hydro & Power Authority (Vancouver) May/88	11	9,561,000
1,018,000	Asarco Canada Petroleum Co. (Calgary)	14	7,242,499
1,016,746	Molson Co. (Montreal) Mar/88	87	1,365,447
2,009,000	Dow Chemical Canada Inc. (Sarnia, Ont)	n.a.	n.a.
1,979,072	Nio Algom Ltd. (Toronto)	62	2,094,313
1,971,752	Anglo-Canadian Telephone Co. (Montreal)	29	3,728,690
915,130	Oscar Corp. (Toronto)	68	1,873,846
89,161	Federal Industries Ltd. (Winnipeg)	112	950,258
897,000	Jim Pattison Group (Vancouver)	119	874,226
821,788	McCain Foods Ltd. (Florenceville, N.B.) June/88	106	1,055,594
915,500	Inter-City Gas Corp. (Winnipeg)	60	2,120,800
14,089	Saskatchewan Wheat Pool (Regina) July/88	143	688,878
89,000	GW Utilities Ltd. (Toronto) June/88	36	3,400,000
660,386	Comline Ltd. (Vancouver)	61	2,114,982
653,654	Southern Inc. (Toronto)	93	1,243,177
600,000	Marshall Canada Ltd. (Toronto) Mar/89	418	65,000
587,722	Humble Canada Inc. (Toronto)	152	630,328
587,096	General Electric Canada Inc. (Mississauga, Ont.)	99	1,174,613
541,000	CIL Inc. (Toronto)	94	1,227,000
538,272	K-Mart Canada Ltd. (Brampton, Ont) Jan/89	150	640,206
5,634	Laidlaw Transportation Ltd. (Burlington, Ont.) Aug/88	63	2,028,644
1,532	Fletcher Challenge Canada Ltd. (Vancouver)	74	1,665,444
1,603	Magna International Inc. (Markham, Ont.) July/88	73	1,665,656
3,400	Windsor Inc. (Montreal) Jan/88	133	753,200
		134	742,602



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HIGHLIGHTS

for the years ended March 31

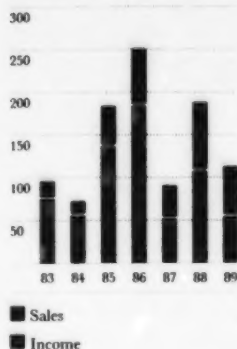
	1989	1988	1987
FINANCIAL PERFORMANCE:			
<i>(in millions)</i>			
Domestic revenues ²	\$ 1,660 (8.2) ¹	\$ 1,534 (3.2) ¹	\$ 1,486 (6.5) ¹
Export revenues ²	109	184	93
	<u>\$ 1,769 (3.0)</u>	<u>\$ 1,718 (8.8)</u>	<u>\$ 1,579 (-4.1)</u>
Income (loss):			
Domestic	\$ 10	\$ (36)	\$ (112)
Export (stabilized)	72	72	163
Discontinued operations	4	19	16
Extraordinary item	—	—	(42)
Net income	<u>\$ 86</u>	<u>\$ 55</u>	<u>\$ 25</u>
Fixed asset expenditures ²	\$ 210	\$ 163	\$ 157
Fixed assets ²	\$ 8,245	\$ 8,293	\$ 8,342
Debt	\$ 6,774	\$ 7,682	\$ 8,021
Debt-equity ratio	80:20	84:16	86:14
Interest coverage ratio ²	1.08:1	1.09:1	.96:1
Average rate increase	NIL	NIL	NIL
OPERATING PERFORMANCE:			
<i>Electricity sold (kWh in millions):</i>			
Residential	10 802 (8.2)	9 986 (2.1)	9 779 (1.3)
General	12 377 (5.8)	11 695 (5.0)	11 137 (3.4)
Transmission	13 606 (1.4)	13 412 (6.6)	12 582 (7.7)
Other	1 048 (5.2)	996 (8.3)	919 (21.4)
Total domestic	37 833 (4.8)	36 089 (4.9)	34 417 (4.7)
Export	4 884	9 481	4 665
	<u>42 717</u>	<u>45 570</u>	<u>39 082</u>
Peak one-hour demand (kW in thousands)	7 485	6 830	6 345
Name-plate capacity (kW in thousands)	10 467	10 473	10 481
Number of employees ²	5 187	5 378	5 381
Number of customers ²	1 233 632	1 207 550	1 184 266

¹Percentage change over previous year.²Excludes Gas and Rail businesses.

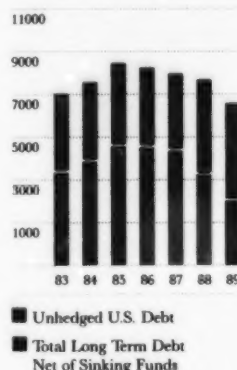
	1989	1988	1987
UNIT COST PERFORMANCE:			
<i>(cents per kWh)</i>			
DOMESTIC			
Average electric revenue:			
Residential	5.4	5.5	5.5
All other domestic	4.0	3.8	3.8
Total domestic - composite	4.4	4.3	4.3
Unit costs:			
Operating expenses	0.7	0.7	0.6
Finance charges and depreciation	2.9	2.9	3.1
Cost of energy and taxes	0.8	0.8	0.9
Total costs	4.4	4.4	4.6
Operating income (loss)	0.0	(0.1)	(0.3)
EXPORT			
Average revenue	2.2	1.9	2.0
Unit costs:			
Own production	0.8	0.7	0.9
Purchased power	0.5	1.1	1.6
Total costs - composite	1.1	0.8	0.8
Operating income	1.1	1.1	1.2
Number of customers per regular employee	274	249	237

1989 PERFORMANCE

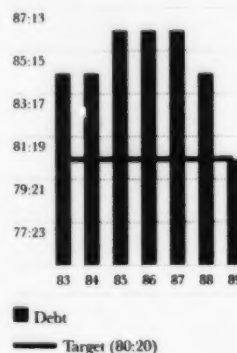
Export Sales
(in millions of dollars)



Unhedged U.S. Debt as a Portion of Total Long Term Debt
(in millions of Canadian dollars)



Debt to Equity Ratio



ACHIEVEMENT OF FISCAL 1989 OBJECTIVES

In our 1988 Financial Review we indicated the financial objectives we had to achieve in support of B.C. Hydro's mission. We were successful in meeting those objectives during 1989.

"To maximize our revenue through the marketing of secondary power."

Sales to the U.S. of power generated using surplus water again exceeded \$100 million and were 70 per cent above forecast. By concentrating on high-return sales we obtained a unit price for power 28 per cent higher than in 1988, partially offsetting a 48 per cent drop in volume. Energy was also acquired from other sources to take advantage of opportunities in the export market.

"To reduce our debt and foreign exchange risk."

The net debt outstanding at the end of the year was lower by \$908 million, with a total reduction for the last two years amounting to \$1.2 billion.

During the year our foreign currency exposure to U.S. dollar debt was reduced by almost U.S. \$1 billion, with U.S. debt now comprising only 34 per cent of total debt. We have also substantially hedged U.S. dollar payments to be made in fiscal 1990.

"To reach and maintain an interest coverage ratio of 1.3:1 by 1991 in order to achieve a debt-equity ratio of 80:20."

During the year we achieved a debt-equity ratio of 80:20. This was accomplished largely through the use of proceeds from the sale of the Gas and Rail divisions and surplus properties, and the investment by the Province of British Columbia of preferred funding in B.C. Hydro.

FISCAL 1989 REVIEW

This year our net income was the third highest in our history, and we experienced our first positive result from domestic operations since 1981. Our operating, maintenance and administration costs per unit of electricity produced are among the lowest in Canada and reflect our effort to supply electricity as efficiently as possible. As well, our overall performance in most other areas was better than the average for Canadian utilities.

Just recently, Standard and Poors Corporation, the U.S.-based rating agency, upgraded both the Province's and B.C. Hydro's credit rating from AA to AA+. This rating is bettered among the provinces only by the AAA rating of the Province of Ontario and Ontario Hydro. Our rating has also been increased by two other major bond rating agencies, Moody's Investor Service and the Canadian Bond Rating Service. This enhancement of our credit worthiness will result in lower future costs of borrowing.

This year also saw the realignment of our corporate organization with the stated intention of developing new market opportunities outside of traditional market boundaries. New subsidiaries were created for the provision of testing and research services (Powertech Labs Inc.), computer services (Western Integrated Technologies Inc. and Westech Information Systems Inc.), and exports of electricity to the U.S. (POWEREX).

RESULTS OF OPERATIONS

Net Income

Consolidated net income for the year was \$86 million, a significant increase over the \$55 million recorded in the previous year. It comprises operating income from domestic operations of \$10 million, stabilized export income of \$72 million and partial year earnings from discontinued operations of \$4 million. The income from discontinued operations reflects the results of the Gas and Rail businesses sold during the year.

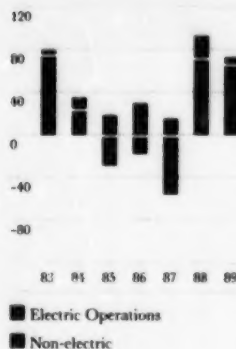
Operating income of \$10 million represents the first profitable year for domestic operations since fiscal 1981. The turnaround of \$46 million from a loss of \$36 million in 1988 was achieved by a combination of strong domestic load growth, major gains on the sale of property and continuing productivity gains. It was also accomplished without any increase in price to domestic customers, who have not experienced a change in rates since April 1, 1986.

The completion of the Revelstoke dam and other projects in the early 1980s coupled with a downturn in the provincial economy led to surplus generation capacity. However, export sales to the United States of secondary energy (comprised of both extra power at Revelstoke and secondary power resulting from surplus water conditions) totalled \$554 million over the past five years. These sales offset domestic losses attributable to finance charges and depreciation on these projects, and resulted in a positive net income for four of the past five years.

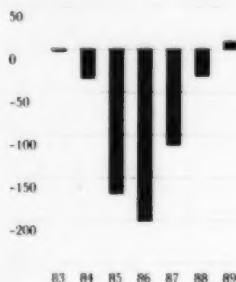
As the capacity constructed in the early 1980s is absorbed by the growing provincial economy, domestic losses are reduced. At the same time there is no longer extra capacity within the system to provide for export sales. Since export now consists mainly of secondary energy sales dependent on water conditions, emphasis must be placed on profitable domestic operations.

Our presence in the export market will continue in order to optimize revenues from secondary sales and maintain a profile in the export energy market.

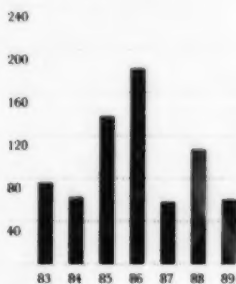
Operating Income by Source
(in millions of dollars)



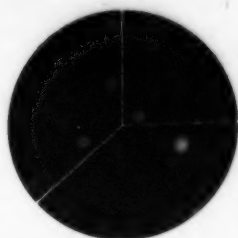
Operating Income From Domestic Electric Operations
(in millions of dollars)



Operating Income From Export Sales
(in millions of dollars)

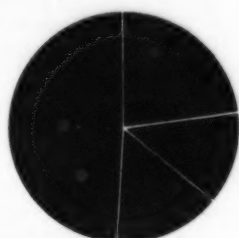


Domestic Revenues by Customer Class
(in millions of dollars)



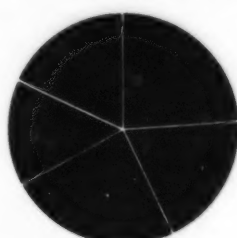
- General (38.9%)
- Residential (36.5%)
- Transmission (24.6%)

Domestic Revenues by Region



- Lower Mainland (49%)
- Vancouver Island (23%)
- Northern (15%)
- Southern (13%)

General and Commercial Revenues by Major Industries



- Manufacturing (24%)
- Service (24%)
- Trade (18%)
- Finance & Real Estate (15%)
- Other (19%)

Revenues

Total domestic electric revenues of \$1.7 billion, an increase of eight per cent over the previous year, were a record. Load growth accounted for five per cent of this increase, while major gains on the sale of property, recoveries under the Critical Industries Act and increased storage return fees from the Bonneville Power Authority accounted for the remaining three per cent.

Our Customers

We classify our customers into residential, general and commercial, and transmission. Although 88 per cent of our customers are in the residential group, residential revenues comprise only 37 per cent of our domestic sales, similar to the revenues of the general and commercial group. The transmission group, which makes up less than one per cent of the total customers, accounts for the remaining 25 per cent of domestic revenue.

On a geographic basis, most of our power is produced in Northern and South Central B. C. while the majority of it is consumed in the Lower Mainland and Vancouver Island. As a consequence, we must bear significant transmission costs to ensure the effective and efficient delivery of electricity from the point of production to the consuming regions.

Residential

During the year 22 356 new customers were added to the system, an increase of two per cent over 1988. This increase was caused by an increased population base and new home construction. Combined with colder than normal weather during the year, these factors resulted in a seven per cent increase in revenue.

Steady growth of the Province's population is reflected in an average annual residential load growth of two per cent per annum since fiscal 1984.

General and Commercial

Revenues from general and commercial electric sales increased by six per cent over the previous year. The service industry, the wholesale-retail trade sector, and the real estate industry accounted for the majority of this increase, while in the transportation and communications industries consumption was also up significantly compared to the previous year. These increases reflect the sustained growth enjoyed over the 1989 fiscal year by buoyant tourism, retail and real estate markets.

Over the past five years general and commercial revenues have increased by 36 per cent. In recent years growth has been particularly strong in the service, trade and real estate sectors.

Transmission

Transmission revenues increased by six per cent, also as a result of the continued strong economic growth in British Columbia during the year. Revenues from the pulp and paper sector rose five per cent due to strong market demand. Although demand from the mining sector only increased by one per cent, revenues increased 20 per cent due to the repayment of \$7 million previously deferred under the Critical Industries Act. This Act was introduced in 1985 to assist several mines operating during the last recession by providing discounted electricity rates. The benefits of this Act have now been demonstrated as all the businesses assisted by this program are still in operation and they have returned, or are expected to return, to us the total amount of financial assistance provided.

The last five years have seen a significant 66 per cent growth in transmission revenues, the bulk of which is attributable to the strong performance of British Columbia's pulp and paper industry.

Export Sales

The power we export is secondary hydroelectric power resulting from surplus water and is only exported on an "as available" basis. Because secondary power is interruptible, the price, quantity and duration is determined daily on the basis of demand and supply. Although there was reduced availability of energy from our system we were able to enhance export sales by purchasing energy from suppliers such as TransAlta Utilities Corporation in Alberta and Alcan Aluminium Limited in British Columbia. Our exports represented about 16 per cent of all Canadian exports to the U.S.A.

Export revenues for the year were \$109 million, down from \$184 million in fiscal 1988, but similar to the level recorded in 1987.

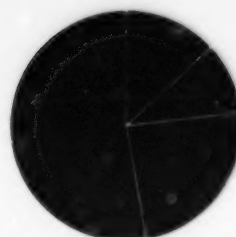
Other Revenues

Other domestic revenues include capital gains of \$22 million on surplus property sales of \$33 million, compared with a gain of \$3 million in 1988 on sales of \$8 million. In addition to realizing the gains, the sales will reduce our costs by about \$4 million a year through property tax savings and the reduction of debt and related finance charges.

We also received \$10 million in storage return fees from the Bonneville Power Authority for storing water for their use.

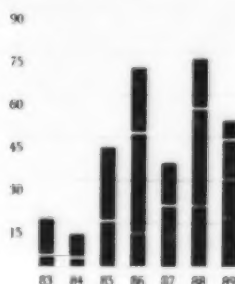
Further earnings were generated through the provision of technical advice and personnel to other countries through our wholly-owned subsidiary, B.C. Hydro International Ltd. In fiscal 1989 we were involved in ten major international assignments and plan to add three more during 1990. Total revenue from these projects was \$3 million for fiscal 1989.

Transmission Revenues by Major Industries



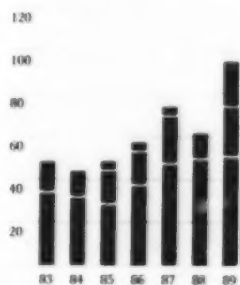
■ Pulp & Paper (53%)
■ Mining (24%)
■ Chemicals & Fertilizers (10%)
■ Other (13%)

Export Sales - Cost of Energy
(in millions of dollars)



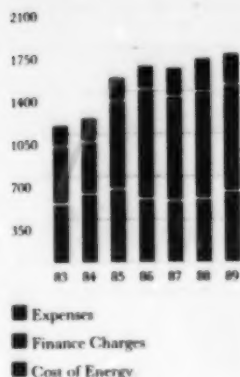
■ Energy Purchases
■ Own Generation
■ Transmission Charges

Other Revenues
(in millions of dollars)

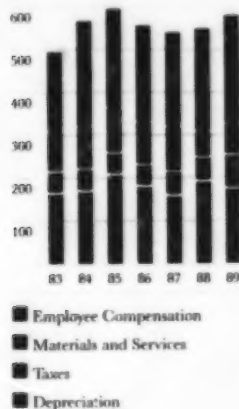


■ Other Energy Sales
■ Miscellaneous Revenues
■ Gain on Disposal of Fixed Assets

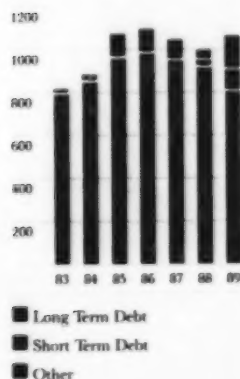
Total Costs
(in millions of dollars)



Operating Expenses
(in millions of dollars)



Gross Finance Charges Components
(in millions of dollars)



Total Costs

Our costs are broken down into three broad categories: cost of energy, expenses and finance charges.

Cost of Energy

Cost of energy represents water rentals, fuel purchased for generation, charges by other utilities for the use of their transmission lines and purchases of electricity from other utilities and independent power producers. Water rentals are amounts paid to the Province on the use of water in hydroelectric generation. Of the total cost of energy of \$264 million for 1989, \$211 million was for water rentals, which were down \$10 million from 1988 due mainly to reduced export sales.

Fuel for generation, at \$23 million, was up \$14 million over 1988 because of the increased use of the Burrard Thermal Generating Plant necessitated by a severe cold spell and reduced water levels.

Expenses

Expenses for the twelve months to March 31, 1989 were \$566 million, an increase of four per cent over the previous year. Increased expenditures on preventive system maintenance to enhance the reliability of electricity supply contributed to a \$32 million increase in materials and supplies. Employee compensation costs dropped by \$22 million, due mainly to the impact of Early Retirement Incentive Program costs taken into account in fiscal 1988. Taxes increased eight per cent during fiscal 1989 after dropping significantly in 1988 due to lower rates and reductions in assessed property values. Over the last five years expenses have risen by an average of three per cent per annum, well below the rate of inflation.

Finance Charges

Finance charges are comprised of the following: interest expense on borrowings, interest income from temporary investments and sinking funds, foreign exchange gains and losses, debt discount and issue costs, and gains and losses on extinguished debt.

Our total finance charges increased by five per cent or \$45 million in fiscal 1989. The main reason for this increase was the significant accounting loss incurred on the retirement of U.S. dollar debt during the year. Offsetting this were lower net interest costs for the year resulting mainly from the reduction of outstanding debt from \$7.7 billion in 1988 to \$6.8 billion as at March 31, 1989.

During the year we took advantage of the strength of the Canadian dollar to purchase for cancellation or to effect the defeasance of U.S. \$480 million of debt. Although this has resulted in an \$80 million accounting loss for the year it will benefit future years through decreased interest expense and will

eliminate exposure to foreign exchange fluctuation on both the debt and related interest. In addition, we also repurchased \$134 million of U.S. dollar debt.

As a result of these significant reductions in U.S. debt our exposure to foreign exchange fluctuation has dropped sharply. At March 31, 1986 a decrease of one per cent in the value of the Canadian dollar would have resulted in an increase to our annual finance charges of \$9 million and debt owing of \$70 million; this compares to an estimated \$4 million and \$24 million respectively at March 31, 1989.

Financing and Capital Expenditure

In the early 1980's we made significant borrowings in order to finance the construction of the Revelstoke Dam and other major projects. After these were completed capital expenditures were significantly reduced. Over the last three years capital expenditures have been slowly rising, mainly due to customer transmission requirements. The coming year will see a significant jump in expenditures as we implement the maintenance and system enhancements required for us to meet growing customer needs. Through our Power Smart and Resource Smart programs we aim to defer the construction of major generation facilities as long as possible.

Over the last four years export sales have given us the ability not only to meet our capital expenditures, but to repay some of our debt. Further, the sale of the Gas and Rail businesses and non-essential assets has enabled us to make a significant reduction in debt over the last fiscal year.

Debt Management

Our current debt to equity ratio of 80:20 is considered appropriate by our lenders and regulators. It is our objective to maintain, if not improve this ratio.

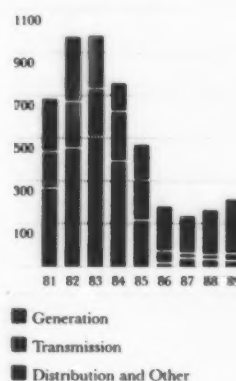
In fiscal 1988, we carried out a study to determine if liabilities, particularly debt and related sinking funds, could be better managed to reduce risk. This resulted in revised objectives and financing strategies which are intended to minimize foreign currency risk, improve management of sinking funds, and reduce debt servicing costs.

Consequently, fiscal 1989 has seen increased hedging of U.S. debt, changes in debt composition to include a larger proportion of floating rate revolving borrowings, and the use of available funds to reduce U.S. dollar debt. Under this strategy interest costs have been lowered and exposure to U.S. dollar denominated debt has been significantly reduced.

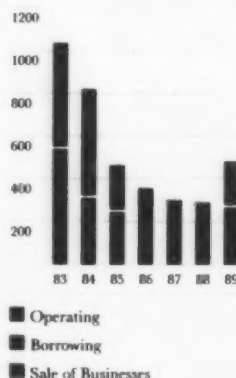
a) Debt Outstanding

After reaching a peak of \$8.6 billion in 1985, debt has been reduced to \$6.8 billion. The level of debt was lowered by \$908 million in 1989 and a total of \$1.2 billion over the last two years. This reduction has been

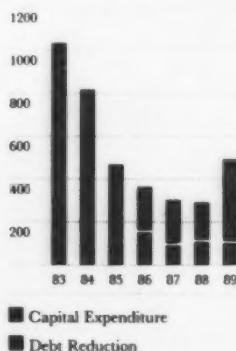
**Capital Expenditures
Electric Service**
(in millions of dollars)



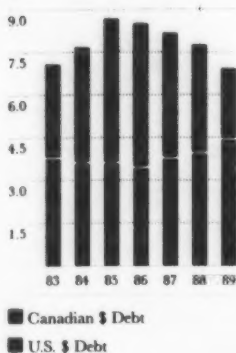
Source of Funds
(in millions of dollars)



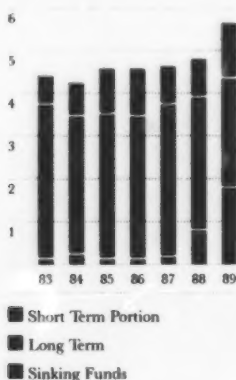
Use of Funds
(in millions of dollars)



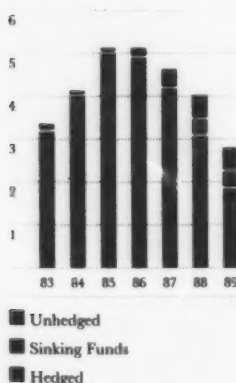
**Long Term Debt
Net of Sinking Funds**
(in billions of dollars)



Total Canadian Dollar Debt
(in billions of dollars)



Total U.S. Dollar Debt
(in billions of Canadian dollars)



achieved by the use of the positive cash flow from operations, the financing of capital expenditures from internal cash flow, proceeds from the sale of the Gas and Rail businesses and the improvement in the value of the Canadian dollar.

b) Debt Composition Changes

During the past year, under our range management plan, we shifted a portion of fixed-rate long-term debt to short-term debt with a floating rate. As a result 22 per cent of our debt was held under a revolving borrowing facility as at March 31, 1989 compared with eight per cent in 1988. Using a revolving borrowing facility in this manner allows us to maintain financing flexibility while managing interest rates to minimize long-term borrowing costs and avoid locking-in to high long-term interest rates. This strategy has saved us \$7 million in interest costs to March 31, 1989, and positioned us to take advantage of expected lower long-term interest rates over the next year.

c) Reduced Currency Exposure

Historically, a significant portion of our debt has been in U.S. dollars, reaching a peak in 1985 at U.S. \$3,742 million, or 58 per cent of total debt. Since then we have sought to reduce our U.S. debt and our exposure to fluctuations in the U.S. dollar with respect to the Canadian dollar. This has been achieved by a program of principal and sinking fund payments, debt repurchases, debt defeasance and the purchase of forward exchange contracts.

As at March 31, 1989 our U.S. debt was U.S. \$1,919 million, or 34 per cent of total debt. This represents a reduction of U.S. \$976 million from 1988, when U.S. debt comprised 47 per cent of total debt. At the same date, U.S. \$312 million of debt and future sinking fund instalments was hedged with forward exchange contracts, eliminating that exposure to exchange rate changes. As a result of these hedges, our net foreign exchange exposure on debt principal as at March 31, 1989 was U.S. \$1,607 million, a 38 per cent decrease from \$2,580 million in 1988.

As well, a significant portion of our U.S. dollar interest payments for 1990 has been hedged.

REGULATION AND FINANCIAL RATIOS

Our operations, including our electric rates, are regulated by the British Columbia Utilities Commission (the "Commission"), subject to any general or special direction of the Lieutenant-Governor in Council with respect to the exercise of its powers.

Rate Stabilization

Income from export sales is placed into a Rate Stabilization Account and released at the discretion of the Commission. The objective of the account is to smooth the impact of export sales fluctuations and minimize changes in the rate structure to domestic customers. In fiscal 1989, export income of \$57 million was transferred to the rate stabilization account and \$72 million was released from it with an increase to net income of \$15 million. In the previous year, \$110 million was paid into the account and \$72 million released from it for a decrease in net income of \$38 million.

Financial Ratios

A special direction issued in March 1984 stated that we should improve our interest coverage ratio with reasonable consistency so as to achieve a ratio of 1.3:1 by fiscal 1991. The special direction also required that we maintain an interest coverage ratio of 1.3:1 after fiscal 1991 so as to achieve and maintain a debt-equity ratio of 80:20.

a) Debt-to-Equity Ratio

The debt to equity ratio is an indication of financial strength, and the achievement and maintenance of this ratio assists our credit rating with a consequent benefit to our borrowing costs.

We calculate our debt-equity ratio according to the requirements of the Commission. Debt comprises short-term and long-term debt, including debt due within one year, less temporary investments. Equity includes retained earnings, preferred funding and deferred credits.

Our debt-equity ratio has improved over the last two years from a ratio of 86:14 to 80:20, which is the ratio specified in the March 1984 special direction.

b) Interest Coverage Ratio

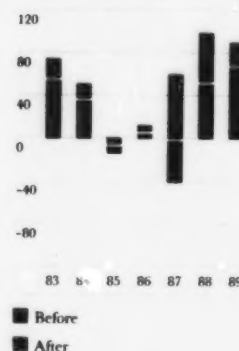
The interest coverage ratio is also an indicator of our financial strength and our ability to meet interest payments out of operating income.

Our 1989 interest coverage ratio of 1.08:1, before the rate stabilization account adjustment, was below our desired level. If the \$80 million dollar accounting loss on debt extinguishment is excluded from the calculation, the ratio improves to 1.18:1. The real effect of this extinguishment will be felt next year when finance charges should decline significantly from this year's \$872 million to an estimated \$760 million.

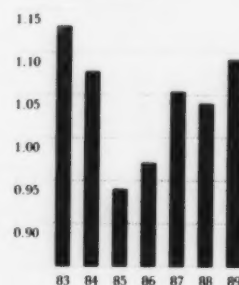
SALE OF BUSINESSES

During the year we sold our non-electric businesses: the Mainland Gas Service on July 16, 1988, the Rail Service on August 31, 1988 and the Victoria Gas Service on February 28, 1989. The Mainland Gas Service was sold for

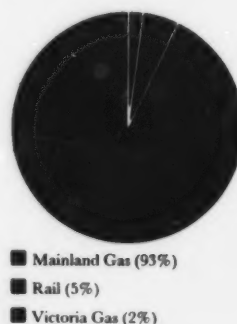
**Rate Stabilization Impact
Comparison of Operating
Income Before and After
Rate Stabilization Adjustment
(in millions of dollars)**



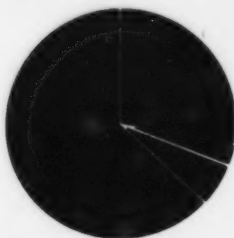
**Interest Coverage Ratio
After the Impact of
Rate Stabilization**



**Proceeds from
Sale of Businesses**

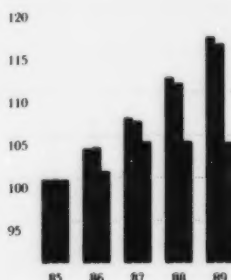


**Distribution of
Sale Proceeds**



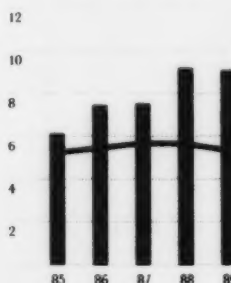
- Net Book Value (63%)
- Gain on Sale (28%)
Paid to the Province
- Pension Plan Payment (6%)
- Costs of Sale (3%)

**Residential Electricity Prices
(1985 = 100)**



- C.P.I.
- Electricity Price
- B.C. Hydro Price

**Sales Per Employee
(million kWh / regular employees)**



- C.E.A. Average

\$741 million and the Rail Service for \$38 million. The agreement for the sale of the Victoria Gas Service was for \$17 million, of which \$11 million is conditional upon the delivery of natural gas to Victoria B.C., prior to January 1, 2002.

The total proceeds were \$787 million. Costs and adjustments associated with the sales accounted for \$24 million and a further \$50 million was set aside to ensure that there was no increase in liabilities to the B.C. Hydro Pension Plan. Of the remaining \$713 million, \$493 million, essentially representing the net book value of the assets sold, was retained by B.C. Hydro. The remaining \$220 million was paid to the Province pursuant to the requirements of the Hydro and Power Authority Privatization Act. The Province, in turn, provided preferred funding of \$235 million to B.C. Hydro, replacing debt with equity thereby strengthening our balance sheet and improving our financial flexibility. This funding resulted in an improvement to our interest coverage ratio with the consequent positive impact for our customers.

The debt reduction of \$728 million achieved through a combination of the sale of fixed assets and preferred funding enabled us to achieve our mandated debt to equity ratio and to move rapidly towards achieving a 1.3:1 interest coverage ratio. This would not have been possible without the sale of these businesses.

In order to provide a smooth transition from businesses that were fully integrated with B.C. Hydro to independent operations we have provided certain transitional services to these companies, some of which run through to 1991. The development of these agreements has also highlighted areas where joint service agreements may be pursued with other utilities at an overall cost saving.

KEY COMPARISONS TO OTHER UTILITIES

Rates

The natural advantage of a relatively low-cost hydroelectric power supply combined with an efficient operation ensures that our electrical rates are among the lowest in the Western World. Our average residential rate of 5.4 cents per kilowatt hour is 20 per cent lower than that of Toronto and only slightly more than that of Montreal. British Columbians enjoy residential prices that are one-half the average of the United States and a third those of New York City. Overseas, the Japanese pay over four times, and the Europeans three times, as much for residential electricity as we do.

Our domestic customers have not faced a rate increase since April 1, 1986. When inflation is taken into account our prices have actually declined in real terms. In comparison, average Canadian electrical prices have climbed by over 16 per cent since 1985, at a similar pace to the Consumer Price Index, while ours have only increased by five per cent over the same period.

Unit Costs

Our unit costs for operating expenses are 36 per cent below the Canadian Electrical Association (CEA) average and are among the lowest in Canada. This reflects the nature of our power resources and our continuing commitment to the efficient supply of that power.

Total costs including finance charges, depreciation and water rentals are significantly higher and slightly above the Canadian average. Finance charges increased as a result of the capital expansion required in the early 1980s and are expected to diminish following recent debt repayments. Water rentals are a significant component of our energy costs and equate to approximately 12 per cent of domestic electric revenues. These other costs push our total domestic unit costs above the Canadian average.

Productivity

Our operating efficiency is reflected in the number of residential customers we service per regular employee, which in 1989 was 274, compared to 249 in 1988 and to a CEA average of 141 for both years. Over the last five years our ratio of the number of customers per employee has grown significantly more rapidly than that of the CEA average.

On the production side, we generated 9.1 million kilowatt hours per employee in 1989, compared with 5.4 million kilowatt hours per employee for the CEA. From 1985 to 1989 our generation per employee has increased from close to the CEA average to significantly above it.

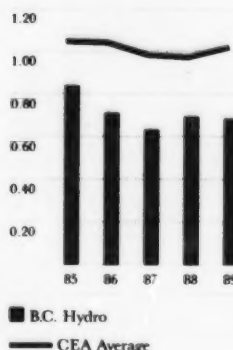
System Reliability

We continue to outperform other Canadian utilities in the area of system reliability. The latest information available shows that we have the least number of service interruptions compared to other major utilities, and the second shortest disruption when an outage does occur, despite the geographical difficulties we face in transmission.

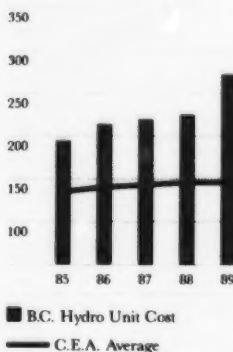
Rate of Return

Our rate of return on equity is lower than the CEA average, partially due to our relatively low electricity rates, and in 1989 was six per cent compared to 10 per cent for the CEA. Our rate of return has increased steadily over the last five years.

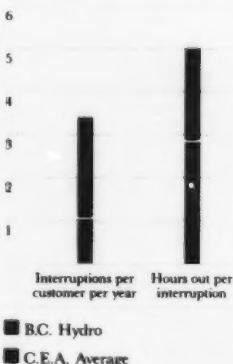
Operating Expenses
(cents per domestic kWh)



Customer Service
Customers / Regular Employee



System Reliability
(12 months ended 31 Dec 1987)



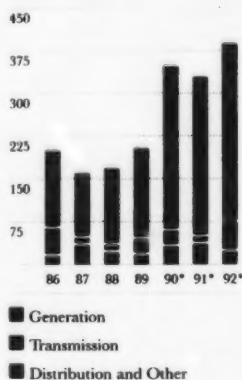
FINANCIAL PLANS AND OBJECTIVES - 1990 TO 1992

1990 OBJECTIVES

We have developed a comprehensive three year financial strategy which is consistent with future operating plans, supports corporate rate objectives and is consistent with Provincial government policy. Specifically, for fiscal 1990 we intend to:

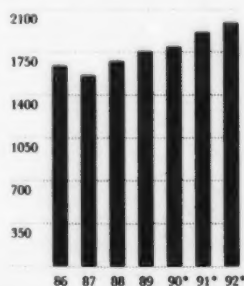
- Implement a long-range rate strategy designed to encourage the conservation of electricity, provide certainty for our customers and avoid large rate increases should new higher cost supply be added to the system in the future.
- Improve financial performance and continue efficient operations.
- Continue to reduce exposure to foreign exchange risk and minimize interest costs.
- Maintain a debt-equity ratio of 80:20.
- Generate a sound return on our shareholders' investment.

Capital Expenditures by Category
(in millions of dollars)



* Forecast

Total Electric Revenues
(in millions of dollars)



* Forecast

THE FINANCIAL PLAN

We are now moving from a lengthy period of financial restraint and consolidation to a period of strategic renewal. Whereas the concern of the last few years was on improving our efficiency, the next three years will see significant increases in capital and operating expenditures to catch up on deferred maintenance and to improve the company's position as it approaches resource balance. Being in a state of resource balance will remove some of our operating flexibility and requires that we place more emphasis on the management of our resources and demand-side requirements.

REVENUE

On the short-term planning horizon the demand for electricity, based on the 1989 forecasted domestic load, is expected to grow in the next year at 4.6 per cent and then slow in the two subsequent years to 2.4 per cent. Lower rate transmission and general categories are expected to grow at a faster pace than higher rate residential categories, resulting in revenues growing slightly less than total electricity sales volumes.

The following revenue initiatives will be implemented to help provide the financial resources necessary to fund planned operating and capital initiatives, while meeting established dividend targets.

- Sales of surplus assets will continue.
- Efforts will be made to implement or enhance user charges for those customer services currently not recovering their costs.
- Every opportunity will be taken to increase export profits, through the purchase and sale of energy.
- Rate increases of three per cent per year for three years, which are below the expected rate of inflation, will be sought from the British Columbia Utilities Commission. This pricing approach would provide for smooth increases over several years, thus avoiding rate shocks when higher cost supply is brought into production in the future. It would also provide certainty to industry for planning purposes and encourage conservation of energy.

The effects of increased domestic demand and projected rate increases on our revenue will be mitigated to some extent by a reduction in load requirements as our energy conservation programs take effect.

EXPENSES

Cost of Energy

Domestic cost of energy is forecasted to be 13.6 per cent of domestic electric revenues in 1990 compared with 12.8 per cent for 1989. This is largely attributable to increased use of the Burrard Thermal Generating Plant. For 1991 and 1992, the cost of energy levels off at approximately 12.4 per cent of electric revenues.

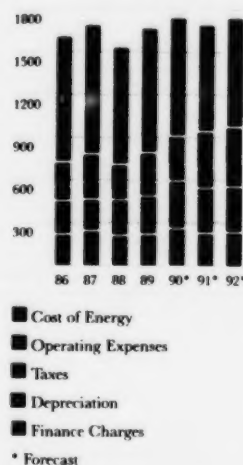
Expenses

Total expenses are forecasted to increase by 16.3 per cent in fiscal 1990 and then pull back to increases of 5.5 per cent and 4.3 per cent in each of the two subsequent years. Inflation is expected to average 4.5 per cent per annum over this period. Over the entire three year period expenses will increase on average by approximately 8.5 per cent. The large increase in the first year is due to the amount of preventive maintenance, increased expenditures on human resources and preliminary work on future generation projects that will be undertaken.

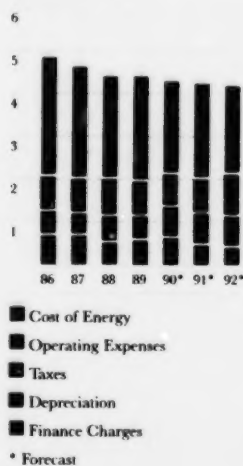
Finance Charges

Finance charges are forecasted to drop significantly from \$872 million in fiscal 1989 to approximately \$760 million in 1990. This reflects the elimination of \$80 million of defeasance costs recorded in fiscal 1989 and lower interest costs due to the reduction of our debt.

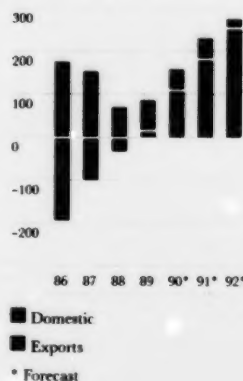
Total Domestic Costs
(in millions of dollars)



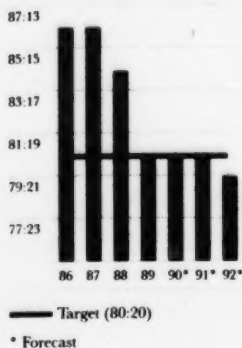
Unit Cost of Sale
(cents / kWh)



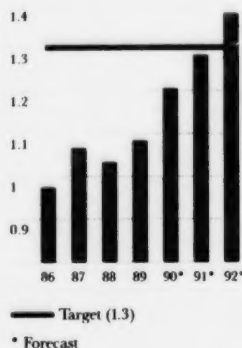
Income
(in millions of dollars)



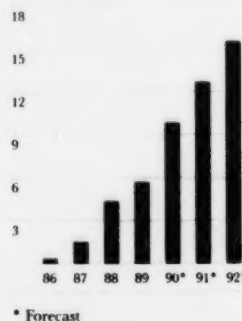
Forecast Debt to Equity Ratio



Forecast Interest Coverage Ratio



Forecast Return on Equity (percentage)



NET INCOME

Domestic Income

Based on the above forecasts, including the planned rate increases, operating income from domestic operations is forecast at \$111 million in fiscal 1990, \$178 million in 1991 and \$262 million in 1992.

Export Income

Export income is forecast at \$30 million for fiscal 1990 increasing to \$37 million in 1991 and declining to \$20 million in 1992.

Net Income

Net income of approximately \$660 million is projected over the next three years, producing \$1,410 million in funds from operations. These funds will be sufficient to cover forecast dividend payments to the Province and net capital expenditures.

CAPITAL EXPENDITURES

Capital expenditures are forecast at approximately \$350 million a year for the next three years. This spending is divided almost equally between capital required under the electric system plan, recurring plant expenditures, and other specific project expenditures. These annual expenditures represent a significant increase from our average expenditure of approximately \$200 million over the last three years, and emphasize our commitment to providing an effective supply of electricity.

FINANCIAL RATIOS

Our current debt to equity ratio of 80:20 will remain the same for the next two years and is forecast to improve to 79:21 in fiscal 1992.

The decrease in our finance charges and enhancement to our operating income will improve our interest coverage ratio. This ratio is forecast to improve to 1.22:1 in fiscal 1990, 1.29:1 in 1991 and 1.39:1 in 1992 achieving the ratio set for us by the Commission.

EQUITY AND DIVIDENDS

Over the three year period from fiscal 1990 to 1992 our retained earnings will increase by approximately \$160 million after the payment of dividends. Of total forecasted net income for the period of \$660 million, \$500 million in dividends to the Province are projected.

Our return on equity is forecasted to increase from 5.8 per cent for fiscal 1989 to 9.8 per cent in 1990, 12.5 per cent in 1991 and 15.7 per cent for 1992.

FINANCING STRATEGY

Our financing strategy will be as follows:

- Revolving borrowing short-term debt will continue to be managed within a range of 15 to 30 per cent of total debt.
- Exposure to foreign exchange risk will continue to be reduced.

It is forecast that both long-term and short-term interest rates will fall significantly over the next two years. Short-term interest rates should decline over this period from an average of 11.2 percent in fiscal 1989 to 10.7 per cent in 1990, 10 per cent in 1991 and nine per cent in 1992. This will result in a continuing decline in finance charges over the three years. However, these savings will be partially offset by increased costs resulting from a forecasted decline in the value of the Canadian dollar to 81 cents by March 31, 1990 and to 80 cents for the following two years.

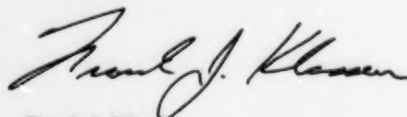
MANAGEMENT REPORT

The financial statements of B.C. Hydro have been prepared by management in accordance with accounting principles generally accepted in Canada, consistently applied and appropriate in the circumstances. Because a precise determination of many assets and liabilities is dependent upon future events, the preparation of periodic financial statements necessarily involves the use of estimates and approximations which have been made using careful judgement. The financial statements have, in management's opinion, been properly prepared within reasonable limits of materiality and within the framework of the accounting policies summarized in the notes to the financial statements. The financial statements have also been reviewed by the Audit Committee and approved by the Board of Directors. Financial information presented elsewhere in this Annual Report is consistent with that in the financial statements.

Management depends upon a system of internal controls in order to provide reasonable assurance, on a cost-effective basis, that financial information is reliable and accurate. This system includes formal written policies and procedures, the careful selection and training of qualified personnel, and an organizational structure that provides for the appropriate delegation of authority and segregation of responsibilities. This system is monitored through the performance of a comprehensive internal audit program. Our external auditors also independently perform such tests of the system of internal controls as they consider necessary for the purpose of expressing their opinion on the financial statements. The Audit Committee, which is comprised of directors who are not employees, meets regularly with representatives of the external auditors, the internal auditors and management in order to satisfy themselves that B.C. Hydro's system of internal controls is functioning properly.



L.I. (Larry) Bell
Chairman



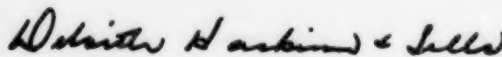
Frank J. Klassen
Vice-President, Finance and Administration

REPORT OF THE AUDITORS

The Lieutenant-Governor in Council, Province of British Columbia:

We have examined the consolidated balance sheet of British Columbia Hydro and Power Authority as at March 31, 1989 and the consolidated statements of operations, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of British Columbia Hydro and Power Authority as at March 31, 1989 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.



Chartered Accountants
Vancouver, British Columbia
May 26, 1989

CONSOLIDATED STATEMENT OF OPERATIONS

for the years ended March 31

	1989			1988		
	Domestic	Export	Total	Domestic	Export	Total
	(in millions)					
REVENUES (Note 2)						
Residential	\$ 588	\$ —	\$ 588	\$ 548	\$ —	\$ 548
General	579	—	579	547	—	547
Transmission	397	—	397	373	—	373
Other	96	109	205	66	184	250
	1,660	109	1,769	1,534	184	1,718
Cost of Energy (Note 3)	212	52	264	200	74	274
GROSS MARGIN	1,448	57	1,505	1,334	110	1,444
EXPENSES						
Employee compensation (Note 4)	173	—	173	195	—	195
Materials and services	88	—	88	56	—	56
Taxes	80	—	80	74	—	74
Depreciation	225	—	225	218	—	218
	566	—	566	543	—	543
OPERATING INCOME BEFORE FINANCE CHARGES	882	57	939	791	110	901
Finance charges (Note 5)	872	—	872	827	—	827
OPERATING INCOME (LOSS)	10	57	67	(36)	110	74
Net rate stabilization transfers (Note 6) ..	—	15	15	—	(38)	(38)
INCOME (LOSS):						
From continuing operations	\$ 10	\$ 72	\$ 82	\$ (36)	\$ 72	\$ 36
From discontinued operations (Note 7) ..			4			19
NET INCOME		\$ 86			\$ 55	

Certain 1988 figures have been restated to conform with the presentation used for 1989 (Note 7).

CONSOLIDATED STATEMENT OF RETAINED EARNINGS

for the years ended March 31

	1989	1988
	(in millions)	
Balance at beginning of year	\$ 595	\$ 540
Net income	86	55
Balance at end of year	\$ 681	\$ 595

CONSOLIDATED BALANCE SHEET

as at March 31

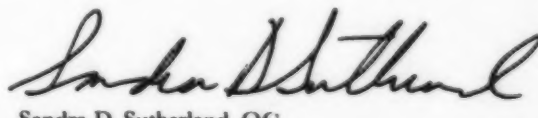
	1989	1988
	(in millions)	
FIXED ASSETS (Note 8)		
Fixed assets in service	\$ 10,608	\$ 10,428
Less accumulated depreciation	2,520	2,289
	8,088	8,139
Unfinished construction	157	154
	8,245	8,293
CURRENT ASSETS		
Temporary investments	71	97
Accounts receivable and unbilled revenues	314	224
Materials and supplies	40	36
Prepaid expenses	47	22
Property held for sale	25	35
	497	414
DEFERRED CHARGES		
Foreign currency translation	114	238
Debt discount and issue costs	42	52
	156	290
NET ASSETS OF DISCONTINUED OPERATIONS	—	461
	\$ 8,898	\$ 9,458
LONG-TERM DEBT (Note 9)	\$ 6,774	\$ 7,682
CURRENT LIABILITIES		
Accounts payable	183	158
Accrued interest	290	303
	473	461
DEFERRED CREDITS		
Rate stabilization account (Note 6)	23	38
Deferred revenue	34	21
Contributions arising from the Columbia River Treaty	332	341
Contributions in aid of construction	346	320
	735	720
PREFERRED FUNDING (Note 10)	235	—
RETAINED EARNINGS	681	595
	\$ 8,898	\$ 9,458

Certain 1988 figures have been restated to conform with the presentation used for 1989 (Note 7).

APPROVED ON BEHALF OF THE BOARD:



L.I. (Larry) Bell
Chairman



Sandra D. Sutherland, Q.C.
Director

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

for the years ended March 31

	1989	1988
	(in millions)	
OPERATING ACTIVITIES		
Operating income	\$ 67	\$ 74
Depreciation	225	218
Other non-cash items including working capital changes	(40)	31
Funds provided by continuing operations	252	323
Funds provided by discontinued operations	14	18
Funds provided by operating activities	266	341
INVESTING ACTIVITIES		
Fixed asset expenditures	(210)	(163)
Contributions in aid of construction	25	30
Net proceeds from property sales	33	8
Funds used for investing activities	(152)	(125)
FINANCING ACTIVITIES		
Revolving borrowings	845	496
Preferred funding	235	—
Bonds, notes and debentures		
- issued	94	9
- retired, including sinking fund changes	(1,507)	(648)
Funds used for financing activities	(333)	(143)
SALE OF BUSINESSES		
Proceeds from sale of Gas and Rail Services	787	—
Payment to the Province	(220)	—
Pension plan payments (Note 11)	(50)	—
Costs related to sale of businesses	(24)	—
Debenture from B.C. Gas Inc.	(300)	—
Funds provided by sale of businesses	193	—
INCREASE (DECREASE) IN FUNDS	(26)	73
FUNDS AT BEGINNING OF YEAR	97	24
FUNDS AT END OF YEAR	\$ 71	\$ 97

Funds at beginning and end of year consist of temporary investments.

Certain 1988 figures have been restated to conform with the presentation used for 1989 (Note 7).

**NOTES TO CONSOLIDATED
FINANCIAL STATEMENTS**

(tabular amounts expressed in millions of dollars unless otherwise stated)

NOTE 1 SIGNIFICANT ACCOUNTING POLICIES

British Columbia Hydro and Power Authority ("B.C. Hydro") is a Crown corporation of the Province of British Columbia (the "Province"). B.C. Hydro is regulated by the British Columbia Utilities Commission (the "Commission"). The accounting policies of B.C. Hydro conform to accounting principles generally accepted in Canada. A description of the significant accounting policies follows. See Note 6 for an explanation of the Rate Stabilization Account.

CONSOLIDATION

The consolidated financial statements include the financial statements of B.C. Hydro and all of its subsidiary companies. Principal subsidiaries of the company, all of which are wholly-owned, are Powertech Laboratories Inc., Western Integrated Technologies Inc., Westech Information Systems Inc., British Columbia Power Export Corporation, B.C. Hydro International Limited and Columbia Estates Company, Limited.

REVENUES

Domestic revenues represent sales of energy to customers within the Province and sales of firm energy to those outside the Province (mainly Seattle and Point Roberts, Washington and Hyder, Alaska) with whom B.C. Hydro has long-term commitments.

Export revenues are derived from energy sales made outside the Province other than those classified as domestic. These sales are surplus to B.C. Hydro's domestic energy requirements.

Customers are billed on a cyclical basis for energy deliveries with unbilled deliveries being accrued and included in revenues.

FIXED ASSETS

Fixed assets in service consist principally of land, water rights, storage dams and plant for the generation, transmission and distribution of electricity, and include the cost of plant financed by contributions in aid of construction and contributions arising from the Columbia River Treaty.

Fixed assets are carried at cost which includes materials, direct labour and appropriate portions of engineering, administration and finance charges.

The costs of any capital development studies which are deferred for more than one year are amortized on a straight-line basis at 20% per annum during the deferral period. Capital projects which are deferred, but for which there is a reasonable probability of proceeding, have a provision made for any reduction in the value of project costs. The costs of capital development studies and capital projects which are abandoned or subject to indefinite deferral are written off.

DEPRECIATION

Depreciation is provided on all depreciable assets in service as at the beginning of each year based on the average service life of the assets and is computed using the straight-line method.

FINANCE CHARGES CAPITALIZED

B.C. Hydro capitalizes finance charges at rates equivalent to the cost of borrowing those funds expended on construction projects during each year of construction.

TEMPORARY INVESTMENTS

Temporary investments are valued at the lower of cost and market.

MATERIALS AND SUPPLIES

Materials and supplies are valued at average cost, less provisions for decline in value.

PROPERTY HELD FOR SALE

Property held for sale is valued at the lower of cost and net estimated realizable value.

FOREIGN CURRENCY TRANSLATION

Long-term debt, sinking funds, current assets and current liabilities denominated in a foreign currency are translated into Canadian currency at the rate of exchange prevailing at the balance sheet date. U. S. currency liabilities which are hedged are converted at the rate established by the terms of the hedge instrument.

Unrealized gains and losses arising from the translation of long-term debt and sinking funds are deferred and amortized over the remaining term of the debt. The annual amortization is determined by dividing the unamortized balance of the gains and losses by the sum of the remaining years, except that for the last four years the unamortized balance is written off on a straight-line basis. Foreign exchange gains and losses on current assets and current liabilities are included in income.

DEBT DISCOUNT AND ISSUE COSTS

Discount and issue costs on long-term debt are amortized on a straight-line basis over the term of the respective debt.

DEFERRED REVENUE

Deferred revenue consists primarily of amounts received under the Skagit River Agreements. These amounts are deferred and included in income on an annuity basis over the energy delivery period ending in fiscal 2066.

CONTRIBUTIONS

Contributions in aid of construction are amounts received from certain customers toward the costs of the extension of services. These amounts are amortized over the estimated service lives of the related assets at an amount equal to the corresponding annual provision for depreciation. Contributions received in respect of unfinished construction are not amortized until the assets are placed in service.

Contributions arising from the Columbia River Treaty are amortized over the period ending in fiscal 2025, the minimum term of the Treaty, at an amount equal to the corresponding annual provision for depreciation of the related assets.

PENSION COSTS

The costs of pension benefits for employee services for the year, determined on an actuarial basis in accordance with the terms of the pension plan agreement, are included in pension expense. Pension expense also includes amortization of the initial net pension surplus, the cost of past service benefits and experience gains and losses. Amortization is on a straight-line basis over the expected average remaining service life of pension plan members. Pension fund investments are valued at a five-year average of market-related value.

NOTE 2 RATE ADJUSTMENTS

There have been no increases to domestic electricity rates since April 1, 1986.

NOTE 3 COST OF ENERGY

	1989			1988		
	Domestic	Export	Total	Domestic	Export	Total
	(in millions)					
Water rentals	\$ 197	\$ 14	\$ 211	\$ 188	\$ 33	\$ 221
Fuel for generation	12	11	23	9	—	9
Purchase of electricity	2	19	21	2	21	23
Transmission charges	1	8	9	1	20	21
	<u>\$ 212</u>	<u>\$ 52</u>	<u>\$ 264</u>	<u>\$ 200</u>	<u>\$ 74</u>	<u>\$ 274</u>

Water rentals are amounts paid to the Province on the use of water in hydro-electric generation. Fuel for generation includes natural gas for the Burrard Thermal Generating Plant and fuel for service areas which are not part of the integrated system. Purchases of electricity are from other utilities and independent power producers. Transmission charges are paid to other utilities for the use of their transmission lines.

NOTE 4 EARLY RETIREMENT INCENTIVE PROGRAM

In fiscal 1988 B.C. Hydro offered an early retirement incentive program to all employees meeting certain criteria of age and service. As a result, employee compensation for 1988 includes amounts for lump sum payments to retirees, payments to the pension plan for waivers of pension reductions normally arising on early retirement and estimated future indexing of these pension waivers.

NOTE 5 FINANCE CHARGES

	1989	1988
	(in millions)	
Interest on bonds, notes and debentures	\$ 827	\$ 954
Interest on revolving borrowing facility	109	15
Amortization of deferred charges:		
Foreign exchange gains and losses	9	10
Debt discount and issue costs	7	14
Loss (gain) on extinguished debt (Note 9)	80	(18)
Other	6	2
	<u>1,038</u>	<u>977</u>
Less:		
Income from sinking fund investments	113	98
Income from temporary investments	7	1
Income from term debenture	27	—
Allocated to discontinued operations	15	48
	<u>162</u>	<u>147</u>
	<u>876</u>	<u>830</u>
Less:		
Finance charges capitalized	4	3
	<u>\$ 872</u>	<u>\$ 827</u>

The effective rate for finance charges capitalized to unfinished construction for fiscal 1989 was 10.0% (1988 - 9.2%).

NOTE 6 RATE STABILIZATION ACCOUNT

The Commission directed B.C. Hydro to create, as of March 31, 1982, an account to be known as the rate stabilization account derived from export sales of surplus electric energy (exclusive of sales made under certain export contracts) less associated direct expenses. Directives from the Commission over the past two years have resulted in the following transfers to and from the account:

	1989	1988
Balance at beginning of the year	\$ 38	\$ —
Transfer from income to the account	57	110
Transfer from the account to income	(72)	(72)
Net rate stabilization transfers	<u>(15)</u>	<u>38</u>
Balance at end of the year	<u>\$ 23</u>	<u>\$ 38</u>

TRANSFERS TO THE ACCOUNT

All revenues from export sales, less associated direct expenses, were transferred to the account.

TRANSFERS FROM THE ACCOUNT

Transfers from the account to income were limited to:

1989 - an amount of \$72 million.

1988 - revenues from the first \$116 million of export sales, less associated direct expenses.

NOTE 7 SALE OF BUSINESSES

During the year B.C. Hydro sold its non-electric businesses to the private sector: the Mainland Gas Service on July 16, 1988, the Rail Service on August 31, 1988 and the Victoria Gas Service on February 28, 1989. The Mainland Gas Service was sold for \$741 million and the Rail Service for \$38 million. The agreement for the sale of the Victoria Gas Service was for \$17 million, of which \$11 million is conditional upon the delivery of natural gas to Victoria, British Columbia, prior to January 1, 2002.

The net book value of the fixed assets of the businesses sold was \$474 million. After deducting amounts for costs, adjustments and a provision for pension payments associated with the sales, an amount representing the net gain of \$220 million was paid to the Province pursuant to the requirements of the Hydro and Power Authority Privatization Act.

Income from discontinued operations of \$4 million for these services for the respective periods to the dates of sale, as noted above, is shown on a net basis in the consolidated statement of operations. The operating results for the year ended March 31, 1988 have also been restated on a net basis. Revenues from the discontinued operations were \$392 million for the year ended March 31, 1988 while expenses for the same period were \$373 million. Revenues and expenses for the period to the respective dates of sale in fiscal 1989 have not been provided as they are not considered to provide meaningful information.

NOTE 8 FIXED ASSETS

As at March 31

	1989						1988	
	Fixed Assets in Service			Unfinished Construction*	Total Net Book Value	Composite Depreciation Rate (%)	Total Net Book Value	Composite Depreciation Rate (%)
	Original Cost	Accumulated Depreciation	Net Book Value					
Generation and storage	\$ 4,991	\$ 897	\$ 4,094	\$ 88	\$ 4,182	1.57	\$ 4,275	1.57
Transmission	2,295	518	1,777	17	1,794	2.40	1,827	2.41
Transformation	1,291	377	914	15	929	2.93	937	2.94
Distribution	1,520	520	1,000	27	1,027	3.82	976	3.81
Buildings, furniture and equipment	324	134	190	6	196	4.86	154	4.39
Other properties	91	26	65	—	65	9.21	72	6.32
Service vehicles	56	41	15	—	15	8.50	17	8.59
Research and development	40	7	33	4	37	3.70	35	4.05
TOTAL	\$ 10,608	\$ 2,520	\$ 8,088	\$ 157	\$ 8,245		\$ 8,293	

* Unfinished construction includes \$84 million (1988 - \$92 million) in deferred capital project costs mainly relating to the Peace Site C and Murphy-Keenleyside deferred capital projects.

NOTE 9 LONG-TERM DEBT

As at March 31

	1989					1988				
	U.S.	(*)	Cdn.	(*)	Total	U.S.	(*)	Cdn.	(*)	Total
Maturing in:										
1989	\$ —		\$ —		\$ —	\$ 427	(13.4)	\$ 166	(7.8)	\$ 593
1990	256	(14.6)	290	(10.3)	546	294	(14.0)	290	(10.3)	584
1991	—		111	(7.8)	111	36	(9.5)	111	(7.8)	147
1992	95	(5.8)	249	(7.1)	344	127	(6.8)	249	(7.1)	376
1993	249	(13.0)	164	(6.9)	413	281	(12.6)	164	(6.9)	445
1994	—		177	(7.1)	177	—		—		—
1—5 years	600	(12.5)	991	(8.1)	1,591	1,165	(12.5)	980	(8.1)	2,145
6—10 years	—		786	(8.5)	786	499	(10.4)	791	(8.2)	1,290
11—15 years	119	(10.3)	1,350	(9.9)	1,469	124	(10.3)	1,121	(9.7)	1,245
16—20 years	627	(8.8)	793	(11.7)	1,420	649	(8.8)	1,099	(11.2)	1,748
21—25 years	1,491	(14.3)	150	(13.5)	1,641	1,547	(14.3)	151	(13.5)	1,698
Bonds, notes and debentures	2,837	(12.6)	4,070	(9.7)	6,907	3,984	(12.3)	4,142	(9.6)	8,126
	(\$2,355 U.S.)					(\$3,204 U.S.)				
Less:										
Sinking funds	388		769		1,157	382		674		1,056
	(\$325 U.S.)					(\$309 U.S.)				
Term debenture	—		300		300	—		—		—
Repurchased debt	134		—		134	—		—		—
	(\$111 U.S.)									
Net bonds, notes and debentures	2,315		3,001		5,316	3,602		3,468		7,070
	(\$1,919 U.S.)					(\$2,895 U.S.)				
Revolving borrowing facility ...	—		1,458		1,458	—		612		612
Long-term debt	\$ 2,315		\$ 4,459		\$ 6,774	\$ 3,602		\$ 4,080		\$ 7,682

* Weighted average coupon rate.

B.C. Hydro's long-term debt comprises bonds, notes and debentures, almost all of which have annual sinking fund requirements, and revolving borrowings obtained under a borrowing agreement with the Province. Long-term debt is presented net of related sinking funds, B.C. Hydro debt repurchased from the market and a term debenture receivable which has been committed to debt repayments. The March 31, 1989 foreign exchange rate used by B.C. Hydro was 83.86 U.S. cents per Canadian dollar.

GUARANTEE BY THE PROVINCE OF BRITISH COLUMBIA

B.C. Hydro's outstanding debt is either held or guaranteed as to principal, interest and premium, if any, by the Province.

SINKING FUNDS

Sinking funds are held by the Trustee, the Minister of Finance and Corporate Relations for the Province. Sinking fund income is recorded as a reduction of finance charges.

Sinking fund changes in the year comprised:

	1989	1988
Instalments	\$ 130	\$ 102
Income reinvested	113	98
Surpluses recovered	—	(123)
	<u>243</u>	<u>77</u>
Withdrawals - debt repayment	(103)	(75)
- debt extinguishment	(25)	(100)
Foreign exchange adjustments	(14)	(22)
Total sinking fund changes	<u>\$ 101</u>	<u>\$ (120)</u>

TERM DEBENTURE

A term debenture has been issued to B.C. Hydro by B.C. Gas Inc. in part settlement of the sale of the Mainland Gas Service. B.C. Hydro has entered into a trust arrangement with the Province whereby the interest and principal payments from B.C. Gas Inc. are to be applied against B.C. Hydro's general indebtedness to the Province.

The term debenture bears interest at 10.75% per annum payable semi-annually and is repayable in four equal annual payments of \$75 million on October 1 from 1990 to 1993. The debenture is secured by a first fixed mortgage on the assets of B.C. Gas Inc. and a guarantee from Inland Natural Gas Co. Ltd. B.C. Gas Inc. may repay the debenture at an earlier date.

REPURCHASED DEBT

Repurchased debt comprises B.C. Hydro bonds, notes and debentures purchased from the market but not cancelled or otherwise extinguished.

REVOLVING BORROWING FACILITY

Funds obtained under a borrowing agreement with the Province will be repaid either from the issue of bonds, notes or debentures or further revolving borrowings extending beyond the next fiscal year. They have, therefore, been classified as long-term debt. The borrowings under the agreement are unsecured, have an authorization limit of \$2.0 billion and bear interest at prevailing money market rates. At March 31, 1989 these funds had a weighted average term to maturity of 116 days at an average coupon rate of 12.4% compared to 84 days and 8.7% as at March 31, 1988.

REDEMPTION PROVISIONS

Certain B.C. Hydro debt held by the Canada Pension Plan Investment Fund and by the Minister of Finance and Corporate Relations of the Province contains provisions allowing holders to redeem the debt prior to maturity, in whole or in part, subject to certain restrictions. At March 31, 1989 this debt amounted to \$771 million (1988 - \$752 million) net of sinking funds.

EXTINGUISHED DEBT

During the year, B.C. Hydro purchased and cancelled U.S. \$181 million of bonds. In addition, sufficient government guaranteed securities were deposited in an irrevocable trust to satisfy the scheduled interest and principal repayment requirements of U.S. \$299 million in bonds. These obligations are considered extinguished for financial reporting purposes and, together with the related securities, have been removed from B.C. Hydro's consolidated balance sheet. The accounting loss of \$80 million arising from these transactions has been included in finance charges.

In fiscal 1988, B.C. Hydro deposited sufficient securities of the Province in an irrevocable trust to satisfy the scheduled interest and principal repayment requirements of Cdn. \$100 million in bonds. These obligations are considered extinguished for financial reporting purposes and, together with the related securities, have been removed from B.C. Hydro's consolidated balance sheet. The accounting gain of \$18 million arising from this transaction has been included in finance charges.

HEDGED U.S. DOLLAR DEBT

At March 31, 1989 U.S. \$312 million (1988 - U.S. \$315 million) of debt and future sinking fund instalments was hedged with forward exchange contracts. A further U.S. \$436 million (1988 - U.S. \$309 million) of debt was hedged by the holding of U.S. dollar denominated securities in sinking funds and repurchased debt. As a result of these transactions, as at March 31, 1989 B.C. Hydro had a net foreign currency exposure in U.S. debt of U.S. \$1,607 million (1988 - U.S. \$2,580 million).

CASH REQUIREMENTS

Total maturity payments and sinking fund instalments on bonds, notes and debentures outstanding as at March 31, 1989, by year of payment are disclosed in the following table. U.S. cash requirements are shown in millions of U.S. dollars. At March 31, 1989 there were 114 Canadian dollar (1988 - 124) and 15 U.S. dollar (1988 - 21) debt issues outstanding.

	Sinking Funds		Net Debt Maturities*		Total	
	U.S.	Cdn.	U.S.	Cdn.	U.S.	Cdn.
1990	\$ 26	\$ 46	\$ 165	\$ 282	\$ 191	\$ 328
1991	26	45	—	90	26	135
1992	26	44	—	180	26	224
1993	23	43	105	108	128	151
1994	23	42	—	111	23	153
1990-1994	124	220	270	771	394	991
1995-1999	116	188	—	275	116	463
2000-2004	106	123	—	64	106	187
2005-2009	80	17	—	118	80	135
2010-2014	34	2	2	—	36	2
	<u>\$ 460</u>	<u>\$ 550</u>	<u>\$ 272</u>	<u>\$ 1,228</u>	<u>\$ 732</u>	<u>\$ 1,778</u>

* Net debt maturities are determined after deducting sinking funds estimated to be available at maturity. This estimate is based on assumed earnings of 10.2% on existing sinking fund investments and future sinking fund instalments.

None of the above cash requirements are considered current as at March 31, 1989 as management intends to finance the payments from the issue of bonds, notes or debentures or further revolving borrowings extending beyond the next fiscal year.

NOTE 10 PREFERRED FUNDING

In November 1988, the Province provided \$235 million of term cumulative preferred funding to B.C. Hydro. The preferred funding is redeemable in November 2008. The Province is entitled to annual dividends at rates that approximate market borrowing rates. Payment of dividends, which are cumulative, may be deferred in any year by the Board of Directors.

NOTE 11 PENSION PLAN

Employees of B.C. Hydro contribute to a jointly-funded pension plan which provides a defined benefit pension based on years of membership service and highest five-year average pensionable earnings. A portion of the required contributions under the plan is applied to provide for annual cost-of-living increases (indexing) to pensioners. Both the basic contribution and the indexing contribution are matched by B.C. Hydro. In addition, in both fiscal 1989 and 1988 B.C. Hydro made special annual contributions of \$4 million to fund past service pension costs and accrued deficits which arose in prior years from plan amendments and changes in actuarial assumptions.

Annual actuarial valuations are obtained to determine the present value of the plan liability for pension benefits accrued to the date of the valuation. These actuarial liabilities are compared with the average market-related value of the pension plan assets to determine whether a net pension surplus or deficit exists. Based upon an extrapolation from preliminary actuarial valuation results as at December 31, 1988, the estimated present value of accrued pension benefits was \$785 million as at March 31, 1989 and the pension plan assets available for these benefits at that date amounted to \$804 million, resulting in a surplus of \$19 million.

As a result of the sale of businesses the pension plan will incur additional costs. These costs are the future indexing of vested pensions provided to employees of the sold businesses who will no longer contribute to the plan and the cost impact of the removal of funds by those employees of the sold businesses who have elected to withdraw their accrued pensions from the plan. The actuary has estimated that the maximum cost to the fund should not exceed \$50 million. B.C. Hydro has paid \$15 million into the pension fund, and a further \$35 million is held in trust to be paid into the fund, if needed, upon the determination of the final cost to the plan.

NOTE 12 COMPARATIVE FIGURES

Certain of the fiscal 1988 comparative figures have been reclassified to conform with the current year's presentation.

FINANCIAL STATISTICS

for the years ended March 31

	1989	1988	1987
	(in millions)		
REVENUE	\$ 1,769	\$ 1,718	\$ 1,579
Cost of energy	264	274	238
GROSS MARGIN	1,505	1,444	1,341
EXPENSES:			
Employee compensation	173	195	161
Materials and services	88	56	55
Taxes	80	74	110
Depreciation	225	218	214
Finance charges	872	827	857
	1,438	1,370	1,397
OPERATING INCOME (LOSS)	67	74	(56)
Net rate stabilization transfers	15	(38)	107
Income (loss) from discontinued operations ¹	4	19	16
Extraordinary items	—	—	(42)
NET INCOME (LOSS)	\$ 86	\$ 55	\$ 25
Domestic	\$ 10	\$ (36)	\$ (112)
Export (stabilized)	72	72	163
Discontinued operations	4	19	16
Extraordinary items	—	—	(42)
NET INCOME (LOSS)	\$ 86	\$ 55	\$ 25
FIXED ASSETS ²			
In service, at cost	\$ 10,765	\$ 11,044	\$ 10,936
Accumulated depreciation	2,520	2,440	2,228
	\$ 8,245	\$ 8,604	\$ 8,708
Fixed asset expenditures	\$ 210	\$ 195	\$ 187
Contributions in aid of construction	25	30	27
Net fixed asset expenditures	\$ 185	\$ 165	\$ 160
DEBT ³	\$ 6,774	\$ 7,682	\$ 8,021
EMPLOYEES AT YEAR-END ⁴			
Regular	4,510	4,851	5,003
Temporary	677	527	378
	5,187	5,378	5,381

¹ 1979 to 1989 includes income from the Gas and Rail businesses on a net basis. 1980 and 1979 include losses on transit operations.² 1979 to 1988 includes assets from the Gas and Rail businesses.³ Restated to conform with 1989 financial presentation. Includes long-term debt, short-term borrowings and long-term debt due within one year.⁴ Excludes Gas, Rail and transit operations employees.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

1986	1985	1984	1983	1982	1981	1980	1979
(in millions)							
\$ 1,647	\$ 1,513	\$ 1,230	\$ 1,174	\$ 1,130	\$ 887	\$ 720	\$ 672
245	211	172	170	118	29	29	20
1,402	1,302	1,058	1,004	1,012	858	691	652
180	212	169	164	153	128	112	102
56	54	53	53	56	37	34	34
112	117	108	103	88	84	66	61
198	215	224	165	140	125	109	99
874	736	480	442	378	375	286	260
1,420	1,334	1,034	927	815	749	607	556
(18)	(32)	24	77	197	109	84	96
(4)	(8)	14	(19)	(90)	—	—	—
31	25	13	—	13	4	(44)	(47)
—	—	—	(77)	—	—	(38)	—
\$ 9	\$ (15)	\$ 51	\$ (19)	\$ 120	\$ 113	\$ 2	\$ 49
\$ (200)	\$ (171)	\$ (39)	\$ (2)	\$ (1)	\$ 109	\$ 84	\$ 96
178	131	77	60	108	—	—	—
31	25	13	—	13	4	(44)	(47)
—	—	—	(77)	—	—	(38)	—
\$ 9	\$ (15)	\$ 51	\$ (19)	\$ 120	\$ 113	\$ 2	\$ 49
\$ 10,749	\$ 10,231	\$ 8,046	\$ 7,566	\$ 7,192	\$ 6,691	\$ 5,991	\$ 5,339
2,037	1,824	1,660	1,499	1,345	1,199	1,063	980
\$ 8,712	\$ 8,407	\$ 6,386	\$ 6,067	\$ 5,847	\$ 5,492	\$ 4,928	\$ 4,359
\$ 224	\$ 484	\$ 820	\$ 1,037	\$ 1,053	\$ 740	\$ 755	\$ 722
34	31	30	65	37	32	25	19
\$ 190	\$ 453	\$ 790	\$ 972	\$ 1,016	\$ 708	\$ 730	\$ 703
\$ 8,490	\$ 8,569	\$ 7,576	\$ 7,064	\$ 6,602	\$ 5,516	\$ 5,296	\$ 4,838
5,179	5,729	6,643	7,067	7,431	7,227	7,301	7,268
323	358	420	420	1,076	978	826	886
5,502	6,087	7,063	7,487	8,507	8,205	8,127	8,154

OPERATING STATISTICS

for the years ended March 31

	1989	1988	1987
GENERATING NAMEPLATE CAPACITY AT MARCH 31			
<i>(rated kW in thousands)¹</i>			
Hydroelectric	9,332	9,332	9,332
Thermal	1,135	1,141	1,149
Total	10,467	10,473	10,481
PEAK ONE-HOUR DEMAND INTEGRATED SYSTEM			
<i>(kW in thousands)</i>			
.....	7,485	6,830	6,345
CUSTOMERS AT MARCH 31			
Residential	1,084,569	1,062,213	1,041,784
General	146,270	142,707	139,936
Transmission	85	80	81
Other ²	2,688	2,527	2,445
Export	20	23	20
Total	1,233,632	1,207,550	1,184,266
ELECTRICITY SOLD (kWh in millions)			
Residential	10,802	9,986	9,779
General	12,377	11,695	11,137
Transmission	13,606	13,412	12,582
Other ²	1,048	996	919
Domestic	37,833	36,089	34,417
Export	4,884	9,481	4,665
Total	42,717	45,570	39,082
Domestic change over previous year (%)	4.8	4.9	4.7
ELECTRIC REVENUES (dollars in millions)			
Residential	\$ 588	\$ 548	\$ 539
General	579	547	524
Transmission	397	373	348
Other ²	50	48	46
Rents and miscellaneous	46	18	29
Domestic	1,660	1,534	1,486
Export	109	184	93
Total	\$ 1,769	\$ 1,718	\$ 1,579
AVERAGE REVENUE (cents per kWh)			
Residential	5.4	5.5	5.5
General	4.7	4.7	4.7
Transmission	2.9	2.8	2.8
Other ²	4.8	4.9	5.1
Export	2.2	1.9	2.0
AVERAGE ANNUAL kWh USE PER RESIDENTIAL CUSTOMER			
.....	9,960	9,385	9,472
LINES IN SERVICE			
Distribution (kilometres) ³	48,640	47,754	47,178
Transmission (circuit kilometres)	17,130	17,056	17,056

¹ Excludes electricity available from other systems. Rated capacity has been exceeded on occasion.² Includes Irrigation, Street Lighting and deliveries to Seattle under the Skagit River agreements.³ 1984 to 1989 includes B.C. Hydro lines on private property.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

1986	1985	1984	1983	1982	1981	1980	1979
9,332	9,332	7,489	7,491	7,491	7,491	6,588	5,883
1,151	1,171	1,271	1,341	1,347	1,346	1,360	1,363
10,483	10,503	8,760	8,832	8,838	8,837	7,948	7,246
6,816	6,193	6,215	5,508	5,902	5,475	5,198	5,091
1,023,468	1,005,533	987,659	967,754	943,587	915,270	882,923	858,397
137,051	134,018	133,652	132,383	130,818	128,163	124,754	123,124
72	67	70	65	62	59	55	52
2,353	2,265	2,336	2,227	2,433	2,636	2,166	2,487
21	22	16	13	14	10	14	16
1,162,965	1,141,905	1,123,733	1,102,442	1,076,914	1,046,138	1,009,912	984,076
9,649	9,667	9,067	8,790	8,755	8,104	7,611	7,407
10,770	10,285	9,957	9,736	9,727	9,377	8,925	8,596
11,681	10,957	9,240	9,040	9,305	9,612	9,229	9,147
757	593	805	1,074	1,177	1,129	688	623
32,857	31,502	29,069	28,640	28,964	28,222	26,453	25,773
9,407	6,378	2,834	3,623	6,315	1,816	870	1,310
42,264	37,880	31,903	32,263	35,279	30,038	27,323	27,083
4.3	8.4	1.3	(1.1)	2.6	6.7	2.6	6.7
\$ 517	\$ 509	\$ 448	\$ 410	\$ 348	\$ 312	\$ 267	\$ 255
498	469	425	389	328	301	261	246
322	307	239	228	161	153	120	105
37	28	31	34	30	29	19	18
21	18	12	14	24	24	15	14
1,395	1,331	1,155	1,075	891	819	682	638
252	182	75	97	233	63	35	33
\$ 1,647	\$ 1,513	\$ 1,230	\$ 1,172	\$ 1,124	\$ 882	\$ 717	\$ 671
5.4	5.3	4.9	4.7	4.0	3.8	3.5	3.4
4.6	4.6	4.3	4.0	3.4	3.2	2.9	2.9
2.8	2.8	2.6	2.5	1.7	1.6	1.3	1.1
4.9	4.8	3.8	3.1	2.6	2.6	2.8	2.9
2.7	2.9	2.7	2.7	3.7	3.5	4.1	2.5
9,427	9,678	9,267	9,214	9,413	9,001	8,736	8,747
46,533	45,795	44,737	42,231	40,789	39,472	38,279	37,125
17,197	16,996	16,701	16,543	16,098	15,335	15,258	14,793

TOTAL REQUIREMENTS FOR ELECTRICITY AND SOURCES OF SUPPLY

	1989		1988	
	kW.h in millions	%	kW.h in millions	%
REQUIREMENTS				
Domestic	37 833	80.4	36 089	72.5
Export surplus	4 884	10.4	9 481	19.0
Line loss and system use	4 360	9.2	4 219	8.5
	47 077	100.0	49 789	100.0
SOURCES OF SUPPLY				
Hydroelectric generation:				
Gordon M. Shrum	15 452	32.8	17 508	35.2
Revelstoke	8 224	17.5	8 269	16.6
Mica	7 258	15.4	7 698	15.5
Peace Canyon	3 799	8.1	4 357	8.7
Kootenay Canal	2 918	6.2	2 918	5.9
Bridge River	2 391	5.1	2 662	5.3
Seven Mile	2 328	4.9	2 304	4.6
Other	4 793	10.2	4 278	8.6
Thermal generation:				
Burrard	515	1.1	2	—
Other	146	0.3	146	0.3
Purchases and other transactions	(747)	(1.6)	(353)	(0.7)
	47 077	100.0	49 789	100.0

GENERATING NAMEPLATE CAPACITY

as at March 31, 1989

	kW in thousands
HYDROELECTRIC PLANTS	
Gordon M. Shrum	2,416
Revelstoke	1,843
Mica	1,736
Peace Canyon	700
Seven Mile	608
Kootenay Canal	529
Bridge River	428
Other	1,072
Total hydroelectric	9,332
THERMAL PLANTS	
Burrard	912
Gas turbine	146
Diesel	77
Total thermal	1,135
TOTAL GENERATING CAPACITY	10,467